

Application No. 10/621,487
Amendment dated March 7, 2005
Reply to Office Action of 12/06/04
Attorney Docket No. 03-12180

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (currently amended) A self-closing and locking hinge system, comprising:

a shaft;

~~a first leaf member rotationally coupled to said shaft defining a vertical plane;~~

and

~~a second leaf member rotationally pivotally coupled to said shaft first leaf via a hinge pin and configured to slide on said hinge pin substantially within said vertical plane under the force of gravity until said second leaf is automatically locked relative to said first leaf;~~

~~wherein said first and second members each include an oblique edge abutting the other oblique edge, such that a horizontal force on the two members is translated into a horizontal and vertical force; and~~

~~wherein said vertical force moves one member vertically with respect to the other member.~~

Claims 2 – 18 (canceled)

Claim 19 (new) The self-closing and locking hinge of Claim 1, wherein said second leaf is unlocked from said first leaf by sliding said second leaf on said hinge pin substantially within said vertical plane against the force of gravity until said second leaf can pivot on said hinge pin relative to said first leaf.

Claim 20 (new) The self-closing and locking hinge of Claim 19, wherein said first leaf includes a first section adapted to receive said hinge pin.

Claim 21 (new) The self-closing and locking hinge of Claim 20, wherein said second leaf includes a second section adapted to receive said hinge pin.

Claim 22 (new) The self-closing and locking hinge of Claim 21, wherein said first and second hinge pin receiving sections comprise complementary vertical abutting portions.

Claim 23 (new) The self-closing and locking hinge of Claim 22, wherein said first and second hinge pin receiving sections further comprise complementary top and bottom oblique abutting portions.

Claim 24 (new) The self-closing and locking hinge of Claim 23, wherein said first and second hinge pin receiving sections further comprise complementary top and bottom stop portions.

Claim 25 (new) The self-closing and locking hinge of Claim 24, wherein said second leaf is automatically locked relative to said first leaf when all of said complementary stop, vertical and oblique abutting portions are in contact with each other, respectively.

Claim 26 (new) The self-closing and locking hinge of Claim 25, wherein said second leaf can pivot on said hinge pin relative to said first leaf when said bottom oblique and stop portions of said second leaf are in sliding contact with said top oblique and stop portions of said first leaf.

Claim 27 (new) The self-closing and locking hinge of Claim 25, wherein said locked second leaf prevents a door operatively coupled thereto from being accidentally opened.

Claim 28 (new) The self-closing and locking hinge of Claim 19, wherein said unlocked second leaf allows a door operatively coupled thereto to open.

Claim 29 (new) The self-closing and locking hinge of Claim 27, wherein said locked door remains in a closed and locked state when said hinge pin is removed from said first and second hinge pin receiving sections by virtue of its complementary top and bottom stop portions being in contact with each other.